Response of June 17, 2005

U.S. Patent Application 09/857,906 Atty Docket No. QMT1.1-US

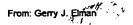
Listing of the Claims:

- 1-8. (canceled)
- 9. (new) An intrinsically antimicrobial material comprising:

an absorbent polymeric matrix having an enhanced surface area;

wherein said enhanced surface area further comprises a polymer of antimicrobial monomeric moieties attached to said matrix via non-siloxane covalent chemical bonds so as to render the polymer non-leachable upon exposure to acids or bases produced during bacterial growth and to leave the material antimicrobial after exposure of the material to skin or aqueous biological fluids.

- 10. (new) The material of claim 9, wherein said aqueous biological fluids are bodily fluids, sweat, tears, mucus, urine, menses, blood, wound exudates, or mixtures thereof.
- 11. (new) The material of claim 9, wherein molecules of said polymer are attached to said matrix via one or more covalent carbon-oxygen-carbon bonds, or carbon-carbon bonds, or carbon-nitrogen bonds, or combinations thereof.
- 12. (new) The material of claim 9, wherein said antimicrobial monomeric moieties are allyl- or vinyl-containing monomers.
- 13. (new) The material of claim 9, wherein said antimicrobial monomeric moieties comprise at least one quaternary ammonium compound.
- 14. (new) The method of claim 13, wherein the quaternary ammonium compound is dimethyldiallyl ammonium chloride, or a trialkyl(p-vinylbenzyl)ammonium chloride, or a p-trialkylaminoethyl styrene monomer.
- 15. (new) The material of claim 9, wherein said matrix comprises cellulose.



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- 16. (new) The material of claim 9, wherein said matrix comprises a polyethylene oxide, a polyvinyl alcohol, or a polyacrylate.
- 17. (new) The material of claim 9, wherein said matrix consists essentially of hydrophilic fibers or filaments having a superabsorbent capacity for aqueous biological fluids as evidenced by being capable of absorbing at least about thirty times its own weight of water.*
- 18. (new) An absorbent dressing, diaper, sanitary pad, or tampon comprising the intrinsically antimicrobial material of claim 9.
- 19. (new) A method for fabricating the intrinsically antimicrobial material of claim 9 comprising the steps of:
 - forming an absorbent polymeric matrix having an enhanced surface area; and
 - attaching a polymer of antimicrobial monomeric moieties in an amount sufficient to impart to the material an antimicrobial effect which remains after exposure of the material to skin or aqueous biological fluids.
- 20. (new) The method of claim 19, wherein said antimicrobial monomeric moieties comprise at least one quaternary ammonium compound.
- 21. (new) The method of claim 20, wherein the quaternary ammonium compound is dimethyldiallyl ammonium chloride, or a trialkyl(p-vinylbenzyl)ammonium chloride, or a p-trialkylaminoethyl styrene monomer.